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HEALTH DEPARTMENT
UNIVERSITY COLLEGE
LONDON

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Annual Report

of the

Medical Officer of Health

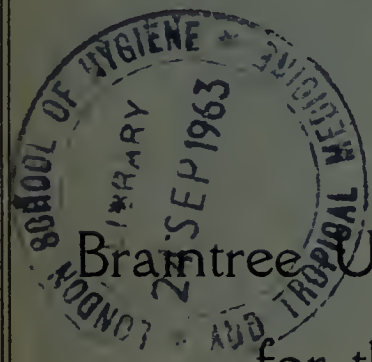
E. BERTRAM SMITH,

M.B., B.S. ; D.P.H.

for the

Braintree Urban District Council

for the Year 1913.



Braintree :

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1914.



ANNUAL REPORT
OF
THE MEDICAL OFFICER OF HEALTH
FOR THE YEAR 1913.

MR. CHAIRMAN AND GENTLEMEN,

In submitting this, my first Annual Report, I wish first of all to thank the members of the Council and their Clerk, for the kind and courteous way in which they have treated me and my reports since I took office in April last; and also to thank my predecessor, Dr. P. R. Stevens, and the Sanitary Inspector, Mr. Nankivell, for the assistance they have given me in helping me to obtain a knowledge of the sanitary affairs of the town with the least possible delay.

Although I am only responsible for a report upon the three quarters of the year that have elapsed since I took office, I have been asked by Dr. Stevens to report upon the whole year, and he has given me the necessary information to enable me to do so.

The year 1913 has been an important one in the sanitary history of the district, and a great deal of excellent work has once more been done by the Sanitary Committee and Council.

I. The new Public Swimming Bath was opened at the commencement of the summer season.

II. Byelaws for the regulation of Slaughter Houses have been submitted to the Local Government Board for adoption.

III. Negotiations for registration have been nearly completed with the occupier of premises at which the business of a Common Lodging House is carried on.

IV. The work of abolishing water-closets flushed directly from the main has been carried steadily forward.

V. In June the Council offered a cordial welcome to the Essex Branch of the Sanitary Inspectors' Association, and accompanied them on their tour of inspection of the new Sewage Disposal Works and Public Baths.

And finally the members of the Council did me the honour to accept my invitation to a demonstration on Meat Inspection, illustrated by numerous specimens, by the Chief Veterinary Inspector to the Corporation of London.

A. NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT.

PHYSICAL FEATURES OF THE DISTRICT. The Urban District comprises the Civil and Ecclesiastical parish of Braintree, having a total area of 2224 acres, of which rather more than two-fifths is Urban in character.

The district is intersected by the shallow valley of the river Brain, on the northern slope of which the greater portion of the town is situated varying in elevation from 180 feet to 230 feet above ordnance datum. The subsoil is a mixture of gravel, loam and clay, lying upon the London clay under which the chalk is reached at a level of about 250 feet.

POPULATION, &c. The population at the time of the census of 1911 was 6168, showing an increase since 1901 of 838, while in the previous 10 years the increase had only been 27. The last 12 or 13 years have been a time of considerable expansion in the chief sources of employment, viz.—iron foundries and engineering works, and as this still continued I have estimated the population to have been 6373 in the middle of the year 1913. Other industries are silk weaving and brush making employing men, and a large silk winding factory employing about 350 women and girls.

One of the latest volumes of census returns shows the number of rooms per house and the number of persons occupying them, and from it the following table is extracted:—

NUMBER OF PERSONS IN PRIVATE FAMILIES. CENSUS 1911.

No. of rooms per Tenement.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15 up.	Total No. in Private Families.	Population in Private Families.
	NUMBER OF FAMILIES.																
1	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	6	6
2	17	9	1	2	1	..	..	..	..	..	..	..	..	..	..	30	51
3	5	9	7	2	7	3	..	..	..	..	..	..	..	..	..	33	105
4	37	118	94	74	61	34	25	12	6	..	1	1	..	..	..	463	1708
5	10	54	64	60	38	26	19	18	9	1	2	1	..	1	..	303	1312
6	11	68	103	100	74	33	18	10	8	2	4	2	2	..	..	435	1816
7	3	18	29	22	20	4	6	5	2	1	2	..	..	..	..	112	470
8	..	7	18	14	7	3	4	5	1	..	1	..	..	..	..	60	265
9	..	2	2	9	6	6	..	..	1	..	..	..	..	..	..	26	121
10 and upwards	..	3	6	6	7	9	6	2	2	..	..	1	..	..	..	42	225
Totals .	89	288	324	289	221	118	78	52	29	4	10	5	2	1	..	1510	6079

The number of houses with more than two persons per room (or roughly four per bedroom) is 15, containing 156 persons or 2·6 per cent. of the population. Nine of them are houses of less than 5 rooms, compared with 15 in 1901. These houses are probably all overcrowded and will be dealt with as come across in the course of the housing inspection.

The figures for poor-law relief are only obtainable for the whole Union area, of which the Urban District is only a fourth on a population basis. The following have kindly been supplied by the Clerk of the Union:—

	Jan.—1903—July.		Jan.—1913—July.	
No. of Outdoor Paupers ..	885	812	599	492
„ Indoor Paupers ..	240	194	240	203
„ Lunatics ..	94	99	91	95

	For the half-years ending			
	Mar.—1903—Sept.		Mar.—1913—Sept.	
	£	£	£	£
Cost of Out-Relief ..	2562	2585	1664	1538
„ In-Maintenance ..	1485	1314	1835	1592
„ Lunatics ..	1038	1091	1466	1497

The facilities for hospital relief are inconsiderable. There is a Cottage Hospital of four beds. The Tuberculosis Officer attends at a Dispensary in the town twice a week.

B. SANITARY CIRCUMSTANCES OF THE DISTRICT.

WATER SUPPLY. The greater part of the district is supplied from the Council's Waterworks. They consist of two deep wells sunk into the chalk. No. 1 well is sunk to the depth of 120 feet and fed by a bore tube reaching a total depth of 330 feet, and extending 100 feet into the chalk. It is brick-lined for the top 190 feet and constructed of steel cylinders for the remaining 20 feet. It was constructed in 1856, when the rest level of the water was within 12ft. of the surface. It is now about 75 feet from the surface, and the level of the water is lowered another 20 feet at the end of a day's pumping. The water is pumped by a two-throw pump driven by a suction gas engine which delivers 12,000 galls. per hour.

No. 2. well, constructed in 1881, is very similar, but is only 100 feet deep, of which the top 20 feet is constructed of steel cylinders and the remaining 80 feet of brickwork. It is fed by a similar bore tube to No. 1 well and water is pumped from it by a three-throw pump driven by steam.

The water is pumped to two towers in the highest part of the town from which it gravitates into the service mains. The highest tank is 70 feet above the highest ground level, 120 feet above the pumping station, and contains 40,000 gallons. The other tank is 30 feet lower and holds 56,000 gallons. An average day's pumping is 8 hours or 96,000 gallons. The two tanks therefore hold a 24 hours supply. The service is constant, the pressure good, and the water of excellent quality. An analysis of it is subjoined.

PHYSICAL EXAMINATION.

TURBIDITY. Very clear and bright, no deposit.
COLOUR. Very faint greyish.
ODOUR. None.

CHEMICAL EXAMINATION.

	Parts per 100,000.
Total Solid Matter dried at 180 deg. Cent.	110.0
Chlorine	40.7
Hardness; Temporary 15.4. Permanent 0.6	16.0
Nitrates	0.13
Nitrites	very minute trace
Free Ammonia	0.028
Organic Ammonia	0.0015
Oxygen absorbed in 3 hours at 37 deg. Cent.	0.019
Probable Composition of Solid Matter.	
Calcium Carbonate	5.25
Magnesium „	5.54
Sodium „	19.83
„ Sulphate	11.84
„ Chloride	67.13
„ Nitrate	0.18
Etc.	0.23
	<hr/>
	110.0
	<hr/>

OPINION. An Excellent Water.

JOHN C. THRESH,

Jan. 26th, 1912.

During the year 5 old and 30 new houses have had a supply laid on; and the adjacent parish of Boeking has ceased to be supplied with water from this Council's works, thus increasing the amount available for Braintree by some 5000 gallons per diem.

The supply to the outlying portions of the district is from shallow wells and springs, and is I think adequate on the whole. Steps have been taken to improve the supply to several cottages during the year.

RIVERS AND STREAMS. The only considerable stream running through the district is the river Brain, and as far as I am aware no serious pollution now occurs.

DRAINAGE. The Urban portion of the district is well sewered, and the sewage disposal works opened in 1910 continues to give very satisfactory results. The former difficulty arising from the excessive amount of 'humus' in the effluent has now been practically done away with by the more frequent emptying of the sludge in the septic tanks.

The sewage passes through screening chambers and detritus pits and three septic tanks in parallel with a capacity of 38,000 gallons each. As a certain amount of sewage is taken from the neighbouring parish of Boeking, the daily dry weather flow a little exceeds the amount of water pumped

(96,000 gallons), but nevertheless the sewage takes more than 24 hours to pass through them. From these tanks the sewage passes over two sets of streaming filters arranged in series, and thence through a humus pit to the out-flow. The filters are operated by automatic valves which work well. With the normal dry weather flow, each bed is receiving sewage for about $2\frac{1}{2}$ minutes and resting for 5 minutes. Their total capacity is therefore 3 times the dry weather flow. Any excess over this quantity up to 6 times the dry weather flow is dealt with by storm water tanks and land. The excess over this amount passes over weirs in the sewers in the town direct into the river. The older sewers are not ventilated and in many places run at the backs of the houses, but no nuisance arises from them. There are some separate storm water drains, but about half the sewered area is on the combined system.

During the year the remaining houses have been connected to the extension of the sewer up Chapel Hill, and a new sewer has been laid for a distance of 795 feet along Grenville Road. Altogether 21 old and 30 new houses have been connected to the Council's sewers. No house drains have been relaid. The only portion of the town that is not yet sewered is a collection of about 12 houses in East Street, which are below the level of the present sewer, but if a new building estate is developed near by as I hope it may be in the near future, it will become possible to sewer these houses.

CLOSET ACCOMMODATION. The great majority of houses have water-closets of a satisfactory type. The Council realising the danger of closets flushed directly from the water mains, have continued their efforts to have them done away with. Fifty-one more have been converted during the year, leaving 45 still in the town; and in all these cases steps are being taken to have them replaced by proper apparatus, so that next year I hope to be able to report their entire abolition. A few privies still exist in the scattered portion of the district, and these are being converted into pail closets. During the year five have been dealt with, leaving not more than a dozen now in existence.

SCAVENGING. A special return on this subject has recently been sent to the Local Government Board. The number of fixed ashpits is about 125, the number of proper sanitary bins is 200, and the number of other moveable receptacles such as carbide tins, galvanized baths, and wooden boxes is 450. The moveable receptacles are emptied weekly and the fixed ashpits fortnightly by the Council's own men into a proper covered cart, and the refuse is disposed of at a tip on the Council's own land, 120 yards distant from any house. No complaints have been made of any nuisance arising from this tip. The removal of house refuse costs £170 per annum, and of street scavenging £210.

There are still a certain number of large uncovered ashpits and manure bins which require attention, but all those reported to the Council during the year have been dealt with. Three-hundred and fifty fixed ashpits have been done away with in recent years, and I hope that in time the number of them will be still further reduced, and also the number of moveable receptacles other than sanitary bins with proper covers.

BATHS. A Public Swimming Bath has been erected by the Council and opened at the commencement of the summer season. It abuts on the river Brain and the Bath is 120×40 feet, and varies in depth from 3 to 7 feet. It is in the open air and provided with covered dressing boxes on two sides. The cost, £1200, has been raised from the rates without the necessity for a loan. It has filled a long felt want and has proved exceedingly popular—17,000 persons having paid for admission during the season, from May 17th, to October 17th. The water is taken from the river and gravitates through a sand filter-bed, $20\text{ft.} \times 12\text{ft.} \times 2\text{ft. } 6\text{in.}$ deep, into the bath.

Through the generosity of Mr. Geo. Courtauld, who has promised £500 for the purpose, hot and cold slipper baths are now being provided.

SANITARY INSPECTION OF THE DISTRICT. The Tabular Statement of work done by the Sanitary Inspector is shown on the opposite page.

BRAINTREE URBAN DISTRICT COUNCIL.

Summary of Work done through the Sanitary Inspector and under the H.W.C. Acts, in the Urban District of Braintree, during the year ending December 31st, 1913.

	Total Number for year.		Total Number for year.
1 Complaints received	6	18 No. of Bakehouses in District Frequency of Inspection ..	9 $\frac{1}{2}$ -yearly
2 Nuisances detected without complaint	294	19 No. of Dairies and Milkshops. Frequency of Inspection ..	1 quart'ly
3 Nuisances abated	232	20 No. of Cowkeepers	7
4 Nuisances remaining unabated ..	62	Frequency of Inspection ..	quart'ly
5 Formal Notices served	15	21 No. of samples of milk taken for examination for cleanliness, etc.	Nil
6 Summonses issued	Nil	22 Filthy houses cleansed	3
7 Convictions obtained	Nil	23 Houses disinfected	27
8 No. of cottages inspected	407	24 Cases of overcrowding abated ..	Nil
8A Primary inspections under H.T.P. Act, 1909, and Housing Inspec- tion Regulations, 1910	228	25 New houses. No. of water certifi- cates applied for .. ..	..
9 No. of cottages found unfit for human habitation	14	26 No. of certificates granted .. ..	..
10 No of representations made with the view of Closing Orders being made	14	27 Public wells sunk	Nil
11 No. of Closing Orders made	0	28 Privies. No. in district	11
12 No. of cottages in which defects were remedied without a Closing Order	51	No. abolished during the year ..	5
13 No. of cottages in which defects were remedied after making Closing Orders	0	29 No. of pail closets	7
14 No. of cottages closed	0	30 No. of W.Cs. with proper flushing arrangements. Except 45 W.Cs. flushed direct, cisterns have been fixed throughout town. ..	..
15 No. of cottages demolished by order	0	31 No. of hand-flushed W.Cs.	Nil
16 No. of Common Lodging Houses in District	1	32 Animals improperly kept removed	3
Frequency of Inspection	not regis- tered	33 Samples of water taken for analysis	Nil
17 No of Slaughter Houses in District	9	34 Compensation paid for bedding, clothing, etc., destroyed	Nil
Frequency of Inspection	quart'ly	35 Seizures of unsound food	Nil

H. H. NANKIVELL,

SANITARY INSPECTOR.

COMMON LODGING HOUSES. In July last I received a complaint, and accordingly visited certain premises with your Sanitary Inspector, and we both came to the conclusion that it was a Common Lodging House. The Council acting upon our report called upon the occupier to apply for registration, and although this was not finally completed before the end of the year, it was progressing rapidly towards accomplishment.

OFFENSIVE TRADES. There are none in the District.

UNDERGROUND SLEEPING ROOMS. Fortunately there are none in the district.

SCHOOLS. There are two Public Elementary Schools in the district, each consisting of Mixed and Infants' Departments, and having together about 1000 children on the books. The Sanitary condition of both are now satisfactory, very extensive and much-needed improvements having been made at the Church School during the year. The Medical Inspection is in the hands of the County Education Committee, with whose School Medical Officer I am in constant communication when necessity arises.

MILK SUPPLY. There are seven registered Cowkeepers in the district, and one Milk Shop. These have been regularly inspected. Two persons have been registered during the year who were previously carrying on their business without being on the register: and in the case of another unregistered person, the premises were so unsatisfactory that the business was given up as soon as representations were made by your Inspector.

Sanitary improvements have been made in the case of five Cowsheds during the year, at the request of your Inspector, and the majority are now satisfactory. Some of the milk produced in the district is sent to London, and a good deal of the milk sold in the town comes from farms in the Braintree Rural District. Similar regulations under the Dairies, Cowsheds and Milkshops Orders are in force in both districts. No action has been necessary for dealing with tuberculous milk.

UN SOUND FOOD. No seizures have been made during the year, though a sharp look out has been kept. A demonstration on Meat Inspection by T. Dunlop Young, Esq., M.R.C.V.S., Chief Inspector to the Corporation Central Meat Markets, London, illustrated by numerous specimens, was held in June last and was attended by members of the Council, many farmers and butchers and other persons interested.

SLAUGHTER HOUSES. These have received a great deal attention during the year.

In July I reported to the Council that several of them were not very satisfactory and suggested that bye-laws should be adopted. The Council took a great deal of trouble in the matter, and a sub-committee visited every slaughter house in the town, and at their December meeting the Council adopted the Model Bye-laws and decided to apply to the Local Government Board for their sanction thereto.

BAKEHOUSES. These have been inspected regularly. There are nine on the register. Limewashing has been carried out as required in all instances. One has extremely insanitary surroundings, and steps to remedy this will be taken shortly.

SALE OF FOOD AND DRUGS ACTS.—MILK AND CREAM REGULATIONS, 1912. These are administered by the County Council, and I have no information as to the number of samples taken for analysis in this district. Under the Regulations no preservative of any kind may now be added to milk for sale.

HOUSING.

The Housing Inspection has been energetically carried forward by the Sanitary Inspector. The tabular statement of work done is as follows:—

No. of dwelling houses inspected under and for the purpose of Sec. 17 of the Act of 1909 : found defective—115 ; not defective—113	228
No. of dwelling house which on inspection were considered to be in a state so dangerous or injurious to health as to be unfit for human habitation	14
No. of representations made to the the local authority with a view to the making of closing orders.	14
No. of closing orders made	0
No. of dwelling houses in which the defects were remedied without the making of closing orders	51
No. of dwelling houses which after making of closing orders were put into a fit state for human habitation	0
General Character of the Defects.	
Defective roofs 13, floors 10, other structural defects 12 ..	35
Dampness of walls or floors	5
Insufficient ventilation from windows	28
Structural defects to W.C.	13
Defective drains or paving round gulley, &c., &c.	19

Action is being taken with regard to the houses which I have represented as unfit for habitation. In some cases they are occupied by a single old person who would be driven to the workhouse if the houses were at once closed, and the Council will see that they are not re-occupied as they fall empty. In others the owners are taking steps to close the houses voluntarily.

Character of the houses. The majority of the houses in the town are satisfactory in character, but there are certain houses or blocks in various parts of the town which cannot be regarded as such, as they are situated up yards or alleys and have little or no open space at the rear. Back to back houses are fortunately almost absent, but a considerable number of these old houses have no through ventilation. But the proportion of bad houses in the town is not large.

Two cases of overcrowding have been come across, and these have not been abated on account of the scarcity of housing accommodation. The town has grown very much during the last few years, and although a great deal of building has taken place, houses are still in demand. About 250 houses have been erected in the past 10 years.

I understand that further building estates are being developed very shortly, and I hope that private enterprise will do still more in the coming year than formerly towards providing further houses, as there is still a demand for houses up to 5/- a week rent. During last year 30 houses were erected, mostly of a good class and probably commanding rents of 6/- per week. I know of very few empty houses in the town and action with regard to some that are unfit for occupation is hindered by this fact.

Bye-laws for the control of new buildings are in force, and the question of revising them is before the Council.

WORKSHOPS, WORKPLACES, &c. These have been visited during the year, but as the Council's register has not been revised for some time, a few may have been missed. I am taking steps to get the register revised at an early date.

Factories and workshops are under the dual control of the Factory Inspector and the District Council. With regard to factories (*i.e.* places where mechanical power is used), the duties of the Council are few—chiefly those of seeing that every factory in its district is provided with means of escape in case of fire, and the enforcement of the provision of suitable and sufficient sanitary conveniences. The other sanitary requirements of factories are under the control of the Factory Inspector.

With regard to workshops the District Council has many important duties, and is made the authority responsible for their general sanitary condition. The sanitary conditions with which the Council is specially concerned are (*a*) cleanliness and linewashing; (*b*) air space; (*c*) ventilation; (*d*) drainage of floors; (*e*) the provision of suitable and sufficient sanitary conveniences for the use of the workers; while the Factory Inspector also visits them to deal with the following matters: (*a*) maintenance of a reasonable temperature; (*b*) provision of mealrooms; (*c*) prevention of dust; (*d*) provision of washing accommodation; (*e*) hours of employment; (*f*) register of females, young persons and children employed, &c. Workshops where only men over 18 years of age are employed are exempt from some of the provisions enumerated in both lists above, except in the case of bake-houses, which are the subject of special legislation, and (unless factories) are to an even greater extent than other workshops under the sanitary control of the District Council.

If either Inspector notices anything amiss at the time of his visit which is in the province of the other to deal with, he is expected to notify it accordingly.

During the year one notification of sanitary defects has been received from the Factory Inspector, the matter dealt with, and the Inspector duly notified of this.

HOME WORK. Employers who give out certain classes of work to be done at the homes of the workers have to send in lists to the District Council of the houses to which the work is taken, so that these can be inspected by your officers in order that the work shall not be carried on under less sanitary conditions in the home than are required in the workshop or factory.

No lists were received during 1913, although I suspect that home-work is given out in the town. I am in communication with the Factory Inspector in the matter.

C. SANITARY ADMINISTRATION OF THE DISTRICT.

1. **STAFF.** Up to March 31st, the duties of Medical Officer of Health were performed by Dr. Stevens, who was also engaged in private practice, but the Urban District having entered into the North Essex Combination of Districts for the purpose of employing a whole-time Medical Officer of Health, I took over the duties from him on April 1st, and opened an office in the town.

The duties of Surveyor, Sanitary Inspector, Housing Inspector, &c., &c., are carried out in an able manner by Mr. Nankivell, who now finds his time fully occupied since the increase of work entailed by the Housing (Inspection of District) Regulations of 1910.

2. **HOSPITAL ACCOMMODATION.** Accommodation for cases of Infectious Disease is provided for by the Joint Hospital Board of the Braintree Urban and Rural Districts, which has proved to be sufficient during the year and well used, as all of 16 cases notified have been removed there.

A Smallpox Hospital has been provided by the Joint Board at Black Notley, but it is now being used for the treatment of Tuberculosis patients by the County Council. It is probable that arrangements will shortly be made for the provision of a new Smallpox hospital for the use of several authorities in North-West Essex, including this district, to enable the hospital at Black Notley to be permanently taken over by the County Council.

The necessity for the means of isolating Smallpox cases is greatly increased by the increasing number of unvaccinated children in the population. With a total of 132 births, there were no less than 91 conscientious objection exemptions obtained during the year.

3. ADOPTIVE ACTS &c.:—

Part III of the Public Health Amendment Act, 1890, was adopted in 1892, and the Baths and Wash Houses Acts were adopted in 1912.

The Infectious Disease Prevention Act—1890, and the Public Health Acts Amendment Act—1907, are not at present in force.

The Council have made the following Bye-laws and Regulations dealing with—

I. Common Lodging Houses	..	adopted in 1890.
II. New Streets and Buildings	..	.. 1893.
III. Markets	.. .. .	.. 1904.
IV. Dairies, Cowsheds and Milk Shops	..	.. 1907.
V. Removal of Manure, Filth, &c.	..	.. ?

There are no Local Sanitary Acts.

The Sanitary Committee of the Council meets monthly to consider our reports.

4. CHEMICAL AND BACTERIOLOGICAL WORK is carried out for the Council by Dr. Thresh, at the County Laboratories, and during 1913 the following examinations have been made:—

Analysis of Waters—Chemical	.. .. .	0
Bacteriological	.. .. .	0
Examination of Throat Swabs for Diphtheria	..	5
The Examination of Sputum for Tubercle	..	0

D. PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASE.

NOTIFIABLE. The year 1913 has been very satisfactory, only 12 cases of Diphtheria and 3 cases of Scarlet Fever having been notified during the year.

One case was also notified as suspected Typhoid Fever, but the subsequent history of the case, I am glad to say, threw some considerable doubt upon this, and it was probably due to the consumption of some fried fish from a shop in the town. Fortunately no other cases of illness arose from the same cause.

Two of the Scarlet Fever cases were infected probably through school attendance, from an epidemic in a neighbouring parish, and we have been fortunate that we had no more cases from that source, although all possible action was taken to prevent the transmission of the disease.

Of the Diphtheria cases, three occurred within three days in April, but no common source could be found, although the milk-supply, day and Sunday School attendance, &c., were carefully enquired into by me; three others occurred in a house which was possibly infected in the first instance from a school in the neighbouring district, the second and third cases occurring a month after the discharge of the first one from hospital; three others occurred in December among the infants attending a Public Elementary School in the town. The school was kept under close observation, all the children examined and swabs taken where necessary and absentees visited at their homes. In this way, the last two of these three cases were discovered, the houses being visited by me as soon as the absence from school was reported by the teachers. What looked like being a serious outbreak was thus I think averted without school closure, although I could not definitely trace the primary source of infection. A few days later another case occurred in a child attending

the mixed department which I traced to a girl who had just returned to the house after having been at home in another district for some indefinite illness for three weeks. Both girls were promptly isolated and no further cases occurred after removal.

No serious epidemic of either disease has occurred since the epidemic of 1904-5, when there were over 80 cases of Scarlet Fever.

The measures taken for the control of notifiable infectious disease are roughly as follows:—As soon as the case is notified arrangements are made for its removal to hospital where advisable, and the house is visited and full particulars taken by the Sanitary Inspector or myself. The schools are visited by me in all cases possibly connected therewith, the children and registers examined, and the homes of any absentees from an unknown or suspicious cause are visited by me. The Sunday School attendance is also investigated where necessary. Throat swabs are taken where I consider it advisable and examined at the Council's expense. The Head Teacher and School Attendance Officer are asked to report any suspicious case to me at once. Contacts and cases after recovery are excluded from school until allowed to return by the practitioner in attendance or myself. Diphtheria antitoxin is provided by the Council free of cost in necessitous cases.

After removal to hospital, or recovery of cases nursed at home, the house is disinfected with sulphur by the Sanitary Inspector, and in certain instances bedding or infected articles such as home work are removed to the steam disinfectant at the hospital, for which a charge of 10/6 is made to the Council by the Joint Hospital Board on each occasion. In some instances it would be cheaper to destroy and compensate. Stripping of walls and re-papering is insisted upon after disinfection where considered necessary.

NON NOTIFIABLE. Mumps was very prevalent in the district during the second quarter of the year, and interfered considerably with school attendance. The teachers notify the School Medical Officer and myself of every case that they hear of, and any action necessary is chiefly taken by the School Medical Officer in consultation with me.

With regard to all cases of infectious disease in schools we are in constant communication and a member of the School Medical Staff visits the schools with me where we think it advisable. School closure, if necessary, is usually ordered by the S.M.O. after consultation with me.

E. PREVALENCE OF AND CONTROL OVER TUBERCULOSIS.

Important measures have been recently initiated to deal with this dread disease. Since February 1st, 1913, all cases of Tuberculosis, whether of the lungs or other parts of the body, have been compulsorily notifiable, and a further system of notification was instituted of the admission and discharge of persons into and from Workhouses and all Sanatoria approved by the Local Government Board under the Finance Act of 1910. This is of great value in keeping track of all notified cases, and of arranging for the disinfection of the house when a patient goes away to an institution for treatment.

Fortunately also the County Council has determined to provide for treatment of non-insured as well as insured persons, and has arranged for the services of its Tuberculosis Officers to be utilised for their benefit. During the year two non-insured persons have had dispensary treatment.

In order to avoid irritation by the unnecessary duplication of visits to notified cases by different officials, most of the primary visits are paid by the Tuberculosis Officer who informs me if any sanitary action is required, and if it is not I usually defer my visit for a time. In all cases where a

shelter is to be provided, I visit and inspect the proposed site, and only after removal to an institution or death does the Sanitary Inspector visit, and then for the purpose of disinfecting the premises. In these cases I think the bedding should be removed to the hospital for steam disinfection in all instances. The number of officials visiting is thus kept as low as possible, consistent with efficiency of action.

The examination of sputum is provided for by the Council, but as the arrangements for the detection of unrecognised cases among contacts are largely in the hands of the Tuberculosis Officer, the examination is now usually carried out through him.

The number of cases notified will be seen from Table II to be 13, of which 8 are pulmonary Phthisis. The notification of pulmonary Tuberculosis was in force last year, when 15 were notified, but the figures are not strictly comparable.

Of these 28 cases, 4 died and 3 removed during 1912, and 11 have died during 1913, leaving the number of 10 notified cases in the district on December 31st.

Four cases of Phthisis and 1 of Hip Disease have had institutional treatment during the year, and of these 3 are cured or much improved, and 2 are since dead.

PHTHISIS DEATH RATE. From Table III it will be seen that seven deaths from Phthisis have occurred, which gives a death rate from this cause of 1.098. Rates based upon such small numbers are of no value for comparative purposes, and so I have calculated the average death rate for the past 5 years (1909-13) which is .937, and for the previous 5 year period (1904-8), which is .833. The death rate for the County for 1912 was .74, and for its Urban Districts .77, so that our rate is somewhat above the average.

F. INVESTIGATION OF OTHER DISEASES.

The death returns have not suggested any special action under this heading.

CANCER. On Table III are shown four deaths which gives a death rate of .628. The average for the last 5 years is .711, and for the previous 5 years .938; and the rate for the County for 1912 was .98, so that I am glad to say we are below the average.

Venereal disease is not very prevalent I am glad to say; there are no local facilities for modern methods of diagnosis and treatment.

G. MEANS FOR PREVENTING MORTALITY IN CHILD BIRTH AND INFANCY.

The Midwives Act is administered by the County Council. From Table IV, it will be seen that only 7 deaths occurred under the age of 1 year, 3 of which were in the first fortnight of life. The mortality rate is 53 per 1000 births. During the year a circular was received from the Local Government Board drawing the attention of the Council to the notification of Births' Act and the importance of the sanitary condition of yards and ashpits, &c. I felt it difficult to recommend the Council to adopt the Act, considering the difficulties of administration, and our low mortality rate, but pointed out the importance of the other recommendations of the circular.

H. VITAL STATISTICS.

TABLE I. BIRTH AND DEATH RATES. The birth-rate for 1913 is 20.9 per 1000 of population and remains very close to those of recent years, which have been recalculated on the estimated population for each year. The rate for England and Wales for 1913 was 23.8, and for Essex 23.3.

The number of deaths registered in the district was 83, to which must be added the deaths elsewhere of 22 residents of Braintree, giving a nett total of 105. Both these figures are rather in excess of those for recent years, and the nett death-rate of 16·15. I cannot find any special cause for this, and rates calculated from such small sets of figures are subject to considerable yearly fluctuations.

Before comparison can be made between the death-rates of different districts, or of England and Wales, a further correction must be made.

It is obvious that a district containing an undue proportion of the very old, must have a higher death-rate than a district with an undue proportion of persons in the prime of life. Factors for correcting for differences between the age and sex constitution of individual districts and that of England and Wales as a whole have therefore been calculated by the Registrar-General on the census population of 1911, and for Braintree the death-rate must be multiplied by ·8898, giving a standardised death-rate for comparative purposes of 14·68.

It will therefore be seen that Braintree contains an undue proportion of persons of the age groups in which the death-rate is highest. The death rate for England and Wales for 1913 was 13·6, and for Essex 10·9, so that even after corrections are made our death rate is still too high.

TABLE II. shows the cases of infectious disease, which have already been discussed. (Pages 9-11).

TABLE III analyses the causes of, and ages at death, and does not show very undue mortality from any special cause.

TABLE IV. INFANTILE MORTALITY. This table is satisfactory and has been discussed (Page 11).

TABLE V. FACTORIES AND WORKSHOPS. The work under this heading has already been referred to. (Pages 7-8).

In conclusion I have to thank the Clerk and the Surveyor for the help they have given me in preparing this report.

I have the honour to remain, Gentlemen,

Your obedient servant,

E. BERTRAM SMITH.

TABLE I.—VITAL STATISTICS OF WHOLE DISTRICT DURING 1913 AND PREVIOUS YEARS—BRAINTREE URBAN DISTRICT.

YEAR	Popula- tion estimated to middle of each Year.	BIRTHS.			TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS		NETT DEATHS BELONGING TO THE DISTRICT.			
		Un-corrected Number	Nett		Num- ber	Rate	of Non- residents registered in the District	of Resi- dents not registered in the District	Under 1 Year of Age.		At all Ages.	
			Num- ber	Rate					Num- ber	Rate per 1000 Nett Births	Num- ber.	Rate
1908	5924	113	..	19.1	75	12.6	1	11	11	97	85	14.3
1909	6012	130	..	21.6	60	10.0	..	13	3	23	73	12.1
1910	6101	125	..	20.5	68	11.1	2	10	3	24	76	12.4
1911	6190	127	128	20.7	67	10.8	2	18	6	47	83	13.4
1912	6281	129	132	21.0	75	11.9	..	17	7	53	92	14.6
1913	6373	132	133	20.9	83	13.0	..	22	7	53	105	16.5

Area of District in acres
(land and inland water)

} 2224

Total Population at all ages
Number of inhabited houses
Average number of persons per house

6,168
1,499
4.1

At Census
of 1911
(Vol. VI.)

TABLE II.—CASES OF INFECTIOUS DISEASE NOTIFIED DURING THE YEAR 1913.
BRAINTREE URBAN DISTRICT.

NOTIFIABLE DISEASE.	NUMBER OF CASES NOTIFIED.								Total Cases Removed to Hospital.
	At all Ages.	At Ages—Years.							
		Under 1.	1 and under 5	5 and under 15	15 and under 25	25 and under 45	45 and under 65	65 and up- wards.	
Small Pox .....	..	..	..	..	..	..	..	..	..
Cholera (C) Plague (P) ..	..	..	..	..	..	..	..	..	..
Diphtheria including Membranous croup) ...	12	..	..	11	..	1	..	..	12
Erysipelas .....	..	..	..	..	..	..	..	..	..
Scarlet Fever	3	..	..	3	..	..	..	..	3
Typhus Fever .....	..	..	..	..	..	..	..	..	..
Enteric Fever	1	..	..	..	..	1	..	..	1
Relapsing Fever .....	..	..	..	..	..	..	..	..	..
Continued Fever .....	..	..	..	..	..	..	..	..	..
Puerperal Fever .....	..	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis	..	..	..	..	..	..	..	..	..
Poliomyelitis .....	..	..	..	..	..	..	..	..	..
Pulmonary Tuberculosis	8	..	..	..	2	4	2	..	4
Other forms of Tubercu- losis.....	5	..	1	3	1	..	..	..	1
Totals	29	..	1	17	3	6	2	..	21

Isolation Hospital
or Hospitals,
Sanatoria, &c.

} Braintree Joint Hospital Boards Isolation Hospital, Cressing Road (within),
and various Tuberculosis Sanatoria provided by the Essex County Council,
(all without the district).

TABLE IV.—INFANT MORTALITY, 1913.—BRAINTREE URBAN DISTRICT.

Nett Deaths from stated causes at various ages under one year of age.

CAUSE OF DEATH.		Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 wks.	4 wks. and under 3 ms.	3-6 months	6-9 months	9-12 mths.	Total Deaths under 1 year.
All Causes	Certified ..	2	1	..	..	3	2	..	1	1	7
	Uncertified ..	..	..	..	..	..	..	..	..	..	..
<hr/>											
Small-pox .....		..	..	..	..	..	..	..	..	..	..
Chicken-pox .....		..	..	..	..	..	..	..	..	..	..
Measles .....		..	..	..	..	..	..	..	..	..	..
Scarlet Fever .....		..	..	..	..	..	..	..	..	..	..
Whooping Cough .....		..	..	..	..	..	..	..	..	..	..
Diphtheria and Croup .....		..	..	..	..	..	..	..	..	..	..
Erysipelas .....		..	..	..	..	..	..	..	..	..	..
Tuberculous Meningitis .....		..	..	..	..	..	..	..	..	..	..
Abdominal Tuberculosis .....		..	..	..	..	..	..	..	..	..	..
Other Tuberculous Diseases .....		..	..	..	..	..	..	..	..	..	..
Meningitis (not Tuberculous) .....		..	..	..	..	..	..	..	..	..	..
Convulsions		1	..	..	..	1	2	..	..	1	4
Laryngitis .....		..	..	..	..	..	..	..	..	..	..
Bronchitis .....		..	..	..	..	..	..	..	..	..	..
Pneumonia all forms .....		..	1	..	..	1	..	..	..	..	1
Diarrhœa .....		..	..	..	..	..	..	..	..	..	..
Enteritis .....		..	..	..	..	..	..	..	..	..	..
Gastritis .....		..	..	..	..	..	..	..	..	..	..
Syphilis .....		..	..	..	..	..	..	..	..	..	..
Rickets .....		..	..	..	..	..	..	..	..	..	..
Suffocation, overlying .....		..	..	..	..	..	..	..	..	..	..
Injury at birth .....		..	..	..	..	..	..	..	..	..	..
Atelectasis .....		..	..	..	..	..	..	..	..	..	..
Congenital Malformations .....		..	..	..	..	..	..	..	..	..	..
Premature birth		1	..	..	..	1	..	..	..	..	1
Atrophy, Debility and Marasmus ..		..	..	..	..	..	..	..	1	..	1
Other Causes .....		..	..	..	..	..	..	..	..	..	..
<hr/>											
		2	1	..	..	3	2	..	1	1	7
<hr/>											
Nett Births in the year						Nett Deaths in the year					
{ legitimate 126						{ legitimate infants 6					
{ illegitimate 7						{ illegitimate infants 1					

TABLE V.—Annual Report of the Medical Officer of Health for the year 1913, for the Urban District of Braintree, on the administration of the Factory and Workshop Act, 1901, in connection with FACTORIES, WORKSHOPS, WORKPLACES AND HOMEWORK.

1. INSPECTION.				
Premises.		Number of		
		Inspections.	Writ. Notices.	Prosecutions.
Factories (including Factory Laundries)		1	..	..
Workshops (including Workshop Laundries) ..		53	..	..
Workplaces (Other than Outworkers' premises included in Part 3 of this Report) .. .		..	..	..
Total		54	..	..

2. DEFECTS FOUND.					
Particulars.		Number of Defects.			Prosecutions.
		Found	Remedied.	Referred to H. M. Inspector.	
NIL.		NIL.			

3. HOME WORK. —No Lists received.

4. REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.				Number.
Important classes of workshops, such as workshops bakehouses may be enumerated here.	Dressmaking .. ..	..	..	6
	Millinery .. ..	..	..	5
	Cycle Repairing .. ..	..	..	2
	Bakehouses .. ..	..	..	9
	Tailoring .. ..	..	..	7
	Saddlery .. ..	..	..	3
	Carpentry .. ..	..	..	7
	Others .. ..	..	..	8
Total number of Workshops on Register ..				47

5. OTHER MATTERS.

Class.				Number.
Matters notified to H.M. Inspector of Factories :—				
Failure to affix Abstract of the Factory and Workshop Acts (s. 133, 1901) ..				..
Action taken in matters referred by H.M. Inspector as remediable under the Public Health Acts, but not under the Factory and Workshop Acts (s. 5, 1901)	Notified by H.M. Inspector			1
	Reports (of action taken) sent to H.M. Inspector			1
	Other .. ..			..
Underground Bakehouses (s. 101) :—				
Certificates granted during the year
In use at the end of the year

24 SEP 1953
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